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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,208	05/08/2001	Keiichi Nakajima	P-277852/NI-	6261

909 7590 07/09/2004

PILLSBURY WINTHROP, LLP  
P.O. BOX 10500  
MCLEAN, VA 22102

EXAMINER

LE, DAVID Q

ART UNIT	PAPER NUMBER
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3621

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/786,208

Applicant(s)

NAKAJIMA, KEIICHI

Examiner

David Q Le

Art Unit

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MLW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2001 and 30 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5, 7, 8</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Examiner's Note***

1. The Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claims, other passages and figures apply as well. It is requested from the Applicant, in preparing the response, to consider fully the entire references as well as the context of all passages in the cited references as potentially teaching all or part of the claimed inventions.

### ***Status of Claims***

2. Per the Preliminary Amendment filed on 30 July 2001:

**Claim 39** was added.

**Claims 1-39** are now pending.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claim 39** is rejected under 35 U.S.C. 101 because the claimed invention is directed to a computer program, i.e. a series of computer instructions, which is not statutory subject matter. By contrast, claim 38 is directed to the same program, but stored on recordable medium, and is therefore statutory subject matter.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 36-37** are rejected under 35 U.S.C. 102(e) as being anticipated by **Randle et al**, US Patent No. 5,974,146.

As per **claim 36**

Randle discloses

An authentication apparatus for communicating with a first terminal and with a second terminal demanding to authenticate a user of the first terminal, and performing the authentication demanded by the second terminal (Abstract; Background and Objects of the Invention; Fig 1A-B, 3A-B; associated text), the apparatus comprising:

a user database storing authentication information registered by a user of the first terminal;

a first communication unit connecting to the first terminal via a first communication network, said first communication unit transmits to the first terminal an order to inquire said authentication information and receives from the first terminal an answer inputted by the first terminal corresponding to the order;

a second communication unit connecting to the second terminal via a second communication network, said second communication unit receives from the second terminal an authentication demand to authenticate the user of the first terminal; and

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a processing unit performing the authentication, said processing unit sets up an identifying number to identify the authentication demanded by the second terminal, and when the first terminal transmits the same identifying number as said identifying number to said authentication apparatus, synchronizes a communication to the first terminal with a communication to the second terminal, retrieves from said user database authentication information to authenticate the user of the first terminal, and by inquiring the answer received from the first terminal with said authentication information retrieved from said user database, authenticates the user of the first terminal; wherein

said second communication unit, by transmitting to the second terminal an authentication result judged by said processing unit, authenticates the user of the first terminal.

As per claim 37.

Randle further discloses (C12 L65 – C12, L7; claim 6)

... said authentication information, said processing unit retrieving from said user database, registered by the user of the first terminal is at least one of a password of the user, voice data spoken by the user, facial portrait image data of the user, at least one of iris and retina data of the user, and finger print image data of the user; and the answer of said processing unit receiving from the first terminal in order to inquire with said authentication information is at least one of character data, voice data, and image data.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-11, 17-18, 22-27, 31-35, and 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wong**, US Patent No. 5,615,110, in view of **Foladare**, US Patent No. 5,914,472.

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As per claims 1, 3, 22, 33, and 38.

Wong discloses

An electronic [settlement system / apparatus / billing terminal / recording medium storing a program] for settling a transaction through a communication network (Abstract; Summary of the Invention; C2, L38 – C5, L18; Fig 1-2, associated text), comprising:

a settlement apparatus which performs the settlement of the transaction (Fig 1: Computer Account Writing System S2);

a billing terminal connecting to said settlement apparatus via the communication network (Fig 1: Deal Action Happens S1); and

a paying terminal, connecting to said settlement apparatus via the communication network (Fig 1: If The Deal Action Is Legal S5),

...synchronizing a communication to said billing terminal with a communication to said paying terminal when said settlement apparatus sets up a transaction identifying number which identifies the transaction (Abstract: "...sends out the transaction information.."; C2, L52 – C3, L48).

Wong's system allows for payment of the transaction if the paying party does not object/respond to the transaction notification. He does not require that the user respond in the claimed manner in order for the transaction to be authorized:

...said settlement apparatus performs the settlement of a transaction ... when said paying terminal transmits the same transaction identifying number to said settlement apparatus.

Foladare discloses a system wherein a paying party gets notified of a pending transaction, and is required to respond with a confirmation before the transaction is authorized and settled with the billing party (Abstract; Summary of the Invention; Fig 1-2, associated text).

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to combine the teachings of Wong and Foladare to arrive at a system as described in these claims, in order to provide an even stronger, more secure, fraud-proof electronic transaction settlement system. Such a system would require confirmation of both authorization and denial of all transactions by the paying party, thus being more attractive to users and therefore promoting higher participation in electronic commerce.

As per claims 2, 4, and 23.

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Wong further discloses

... said billing terminal connects to said settlement apparatus via a commercial telephone line or a private line, and said paying terminal connects to said settlement apparatus via a radiotelephone communication (Fig 1-2, 4-6, associated text).

As per claim 5.

Wong further discloses

... first communication unit receives a purchase amount of the transaction from the billing terminal; said second communication unit transmits said purchase amount to the paying terminal (see above citations; C6, L63 – C7, L12);

Foladare further discloses

said processing unit performs a settlement processing after said second communication unit receives the final purchase confirmation signal from the paying terminal (see above Foladare citations);

said first communication unit transmits a settlement completion notification, which notifies completion of the settlement processing performed by said processing unit to the billing terminal (C3, L12-16).

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to combine the teachings of Wong and Foladare to arrive at a system as described in these claims, in order to provide an even stronger, more secure, fraud-proof electronic transaction settlement system. Such a system would require confirmation of both authorization and denial of all transactions by the paying party, thus being more attractive to users and therefore promoting higher participation in electronic commerce.

Neither references specifically recites

said second communication unit transmits to the paying terminal a receipt which notifies the receiving of said purchase amount of the settlement processed by said processing unit.

However the practice of providing receipts for financial transactions is well known in the industry. It would have been obvious to one ordinarily skilled in the art that such limitation would be inherent in both Wong and Foladare, so as to provide full record keeping capabilities to users of the system, and thus minimize subsequent disputes.

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As per claim 6.

Wong further discloses

...a billing terminal database storing information about the billing terminal,

wherein said first communication unit receives from the billing terminal an identifying number to identify the billing terminal, and said processing unit retrieves information about the billing terminal from said billing terminal database and confirms a registration of the billing terminal, based on the identifying number (Fig 3B: "ID Code written in by Deal Action Signal Transmitting Station (4da); associated text).

As per claim 7.

Wong further discloses

...said second communication unit transmits to the paying terminal the information about the billing terminal, for the paying terminal to confirm the billing terminal, retrieved from said billing terminal database (same citations as above).

As per claim 8.

Wong further discloses

... a paying terminal database which stores information about the paying terminal,

wherein said second communication unit detects a calling telephone number of the paying terminal, said processing unit retrieves information about a user of the paying terminal from said paying terminal database based on the calling telephone number, and said processing unit inquires about at least one of a registration status of the user, a payment history of the user, and available amount of the user (Fig 3A-3B, associated text).

As per claims 9 and 24.

Wong further discloses

said processing unit retrieves at least a part of attribute information of the user of the paying terminal from said paying terminal database, and said first communication unit transmits to the billing terminal at least a part of the attribute information of the user of the paying terminal (see all above citations).

As per claim 10.



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Neither reference recites

said second communication unit receives a message which demands a purchase history of the user of the paying terminal, said processing unit retrieves said purchase history of the user from said paying terminal database, and said second communication unit transmits the purchase history to the paying terminal.

However it is well known in the art that users participate in electronic transactions are typically given the capability to request and receive purchase histories of their accounts whenever they desire, subject to proper authentication. It would have been obvious to one ordinarily skilled in the art that such a feature would be inherent in a system based on Wong and Foladare, in order to provide this convenience to its users and thereby making the system attractive to more such users.

As per claim 11.

Wong further discloses

said first communication unit transmits to the billing terminal a transaction identifying number in order to identify the transaction, and said processing unit synchronizes a communication to the billing terminal with a communication to the paying terminal, and said first communication unit transmits to the billing terminal a synchronization confirmation signal which indicates establishment of synchronization, when the billing terminal notifies said transaction identifying number to at least one of the paying terminal and a user of the paying terminal, and when the paying terminal transmits to said settlement apparatus the same transaction identifying number (see all above citations).

As per claim 17.

Wong further discloses (see all above citations)

... a billing terminal database which stores information about the billing terminal, wherein:

said processing unit retrieves information about the billing terminal from said billing terminal database so that the billing terminal confirms the paying terminal,

said second communication unit transmits to the paying terminal the information about the billing terminal in addition to said transaction identifying number for identifying the transaction, and

when the paying terminal confirms the information about the billing terminal and transmits said transaction identifying number to said settlement apparatus, said processing unit synchronizes the communication to the billing terminal with the communication to the paying terminal, and said first communication unit transmits a synchronization confirmation signal which indicates establishment of synchronization with the billing terminal.

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As per claim 18.

Wong further discloses (see all above citations)

said first communication unit receives from the billing terminal an item ordering information which is for a user of the paying terminal to input an order of an item, said second communication unit transmits the item ordering information to the paying terminal, and when the paying terminal transmits to said settlement apparatus an order of an item, inputted by the user of the paying terminal based on the item ordering information, said first communication unit transmits the order of an item to the billing terminal.

As per claims 25-27, 31-32, and 34-35.

Wong further discloses all the limitations of these claims (see all above citations):

[claim 25] ...a display unit displaying a status of the transaction ... said display unit indicates that said communication unit receives the synchronization confirmation signal.

[claim 26] ... a short range communication unit ...at least one of an optical communication and a wireless communication (Fig 1, associated text).

[claims 27 and 34] ... a purchase amount ... to notify completion of the settlement processing.

[claim 31] ... an item choice unit ...based on the settlement completion notification.

[claim 32] ...order information to prompt the user ... completion of the settlement processing.

[claim 35] ... transmits to the computer terminal at least one of the synchronization confirmation signal and the settlement completion notification ... from the settlement apparatus.

9. Claims 12-16, 19-21, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Foladare, and further in view of Randle.

As per claims 12 and 28.

Neither Wong nor Foladare discloses

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said processing unit retrieves authentication information of the user of the paying terminal from said paying terminal database, and said first communication unit, for the billing terminal to authenticate the user, transmits said authentication information of the user to the billing terminal.

Randle discloses a system for real time electronic transaction settlement wherein payor authentication information is provided in the form of a PIN or biometric information (Abstract; Summary of the Invention; C12 L65 – C12, L7; claim 6).

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to include this feature taught by Randle in a system based on Wong and Foladare, in order to provide an even more convenient and useful user authentication method to merchants, thus making the system more attractive to prospective merchants.

As per claims 13 and 29.

Neither Wong nor Foladare discloses

... said authentication information of the user is a facial portrait of the user.

Randle discloses a system for real time electronic transaction settlement wherein payor authentication information is provided in the form of a PIN or biometric information (i.e. a facial portrait of the user) (Abstract; Summary of the Invention; C12 L65 – C12, L7; claim 6).

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to include this feature taught by Randle in a system based on Wong and Foladare, in order to provide an even more convenient and useful user authentication method to merchants, thus making the system more attractive to prospective merchants.

As per claims 14 and 30.

Neither Wong nor Foladare discloses

... said first communication unit receives a signal requesting password authentication of the user from the billing terminal;

said processing unit retrieves information about the password of the user of the paying terminal from said paying terminal database;

said second communication unit transmits an order of a password request to the paying terminal and receives a password inputted by the paying terminal from the paying terminal;

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said processing unit, receiving the password from the paying terminal, inquires about the information about the password retrieved from said paying terminal database; and

said first communication unit authenticates the user by transmitting a password inquiry result performed by said processing unit to the billing terminal.

Randle discloses a system for real time electronic transaction settlement wherein payor authentication information is provided in the form of a PIN (i.e. a password) or biometric information (Abstract; Summary of the Invention; C12 L65 – C12, L7; claim 6).

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to include this feature taught by Randle in a system based on Wong and Foladare, in order to provide an even more convenient and useful user authentication method to merchants, thus making the system more attractive to prospective merchants.

As per claim 19.

Wong and Foladare do not recite

a voice database which stores user voice data of the paying terminal, wherein:

said second communication unit transmits a message prompting the paying terminal to input a user voice and receives the user voice from the paying terminal, and

said processing unit, by inquiring about the voice of the user using said voice database, authenticates the user.

Randle discloses a system for real time electronic transaction settlement wherein payor authentication information is provided in the form of a PIN or biometric information (i.e. a voice data recording) (Abstract; Summary of the Invention; C12 L65 – C12, L7; claim 6).

It would have been obvious to one ordinarily skilled in the art at the time the invention was made to include this feature taught by Randle in a system based on Wong and Foladare, in order to provide an even more convenient and useful user authentication method to merchants, thus making the system more attractive to prospective merchants.

As per claims 15 and 20.

All three references further disclose (see all above citations)

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...said processing unit retrieves authentication information registered by the user of the paying terminal from said paying terminal database;

said second communication unit transmits an order to inquire about said authentication information to the paying terminal and receives an answer of the paying terminal inputting corresponding to the order from the paying terminal; and

said processing unit authenticates the user by verifying the answer received from the paying terminal against said authentication information retrieved from said paying terminal database.

As per **claims 16 and 21**.

Wong in view of Foladare and further in view of Randle discloses (see claims 12-14 citations, obviousness and motivation analyses above)

...said authentication information registered by the user of the paying terminal, which said processing unit retrieves from said paying terminal database, is at least one of a password of the user, a voice data spoken from the user, a face image data of the user, an image data of an iris or retina of the user, and an image data of finger print of the user, and said answer of said processing unit receiving from the paying terminal in order to inquire with said authentication information is at least one of character data, voice data, and image data.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Le whose telephone number is 703-305-4567. The examiner can normally be reached on 8:30am-5:30pm Mo-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P Trammell can be reached on 703-305-9768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DQL



JAMES P. TRAMMELL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600